



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00003038  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

  
\_\_\_\_\_  
Analytical Supervisor

**Lab-Sample Number:** K00003038001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 10/27/2009 11:47  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.63 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 12.77  
**Dissolved Oxygen:** 11.25 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	200	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	69	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	29	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.29J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	U	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.11J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	160	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.2	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.14J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 10/27/2009 11:47  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.63 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 12.77  
**Dissolved Oxygen:** 11.25 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 10/27/2009 09:58  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 8.34 pH Units  
**Chlorine, residual:**  
**Conductivity:** 54 uMHO  
**Temperature:** 12.37  
**Dissolved Oxygen:** 11.3 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	340	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	400	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	2.6J	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	35	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.37J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	1.1	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.55J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	64	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.5	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.12J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 10/27/2009 09:58  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 8.34 pH Units  
**Chlorine, residual:**  
**Conductivity:** 54 uMHO  
**Temperature:** 12.37  
**Dissolved Oxygen:** 11.3 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

<b>Lab-Sample Number:</b>	K00003038003	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	8.02      pH Units
<b>Sample Description:</b>	Approx 100' downstream from middle dredge pc	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	54      uMHO
<b>Project Site No.:</b>	2A	<b>Temperature:</b>	12.76
<b>Station No.:</b>	Dredge Plume	<b>Dissolved Oxygen:</b>	11.65      mg/L
<b>Date/Time Collected:</b>	10/27/2009    10:10	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>	11/06/2009		
<b>Date/Time Received:</b>	10/27/2009    12:55		
<b>Received By:</b>	Ken Hitchman		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	260	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	200	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	0.50J	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	1.3J	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	30	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.25J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	0.38J	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.31J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	59	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.1	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.06J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038003  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Approx 100' downstream from middle dredge pc  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2A  
**Station No.:** Dredge Plume  
**Date/Time Collected:** 10/27/2009 10:10  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 8.02 pH Units  
**Chlorine, residual:**  
**Conductivity:** 54 uMHO  
**Temperature:** 12.76  
**Dissolved Oxygen:** 11.65 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.9 at underwater weir  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2B  
**Station No.:** EMORY001.9RO  
**Date/Time Collected:** 10/27/2009 10:18  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.79 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 12.63  
**Dissolved Oxygen:** 11.35 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	440	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	800	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	0.55J	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	9.1	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	54	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	0.15J	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	2.4J	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.63J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	2.1	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	1.1	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	64	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	2.2	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.13J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	6.8	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	4.7J	µg/L	1.9	5	M Pattanayek	10/29/2009



**Lab-Sample Number:** K00003038004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.9 at underwater weir  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2B  
**Station No.:** EMORY001.9RO  
**Date/Time Collected:** 10/27/2009 10:18  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.79 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 12.63  
**Dissolved Oxygen:** 11.35 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 10/27/2009 10:30  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.56 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 13.11  
**Dissolved Oxygen:** 11.49 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	340	µg/L	2.9	10	A Wilson	10/27/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	470	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	0.36J	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	4.6J	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	42	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.42J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	1.2	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.67J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	64	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.6	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.08J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	3.6J	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	2.4J	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 10/27/2009 10:30  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.56 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 13.11  
**Dissolved Oxygen:** 11.49 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 10/27/2009 10:45  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.52 pH Units  
**Chlorine, residual:**  
**Conductivity:** 86 uMHO  
**Temperature:** 13.47  
**Dissolved Oxygen:** 10.65 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	230	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	230	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	2.2J	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	37	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.23J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	0.64J	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.38J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	45	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.2	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.05J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	2.5J	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 10/27/2009 10:45  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:** 7.52 pH Units  
**Chlorine, residual:**  
**Conductivity:** 86 uMHO  
**Temperature:** 13.47  
**Dissolved Oxygen:** 10.65 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5.  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.58 pH Units  
**Chlorine, residual:**  
**Conductivity:** 202 uMHO  
**Temperature:** 14.01  
**Dissolved Oxygen:** 9.44 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	150	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	190	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	0.61J	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	2.7J	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	38	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.19J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	0.69J	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.27J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	36	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.2	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.06J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5.  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.58 pH Units  
**Chlorine, residual:**  
**Conductivity:** 202 uMHO  
**Temperature:** 14.01  
**Dissolved Oxygen:** 9.44 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5-FD  
**Station No.:** CLINC002.3RO-FD  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.58 pH Units  
**Chlorine, residual:**  
**Conductivity:** 202 uMHO  
**Temperature:** 14.01  
**Dissolved Oxygen:** 9.44 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	170	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	240	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	0.59J	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	3.9J	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	46	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.27J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	0.94J	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.34J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	44	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.5	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.06J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009



**Lab-Sample Number:** K00003038008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5-FD  
**Station No.:** CLINC002.3RO-FD  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.58 pH Units  
**Chlorine, residual:**  
**Conductivity:** 202 uMHO  
**Temperature:** 14.01  
**Dissolved Oxygen:** 9.44 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038009  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5-FB  
**Station No.:** CLINC002.3RO-FB  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

# Field Determinations

**pH:**  
**Chlorine, residual:**  
**Conductivity:**  
**Temperature:**  
**Dissolved Oxygen:**  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	U	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	U	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	U	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	U	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	U	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	U	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	U	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	U	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038009  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5-FB  
**Station No.:** CLINC002.3RO-FB  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**

**pH:**

**Chlorine, residual:**

**Conductivity:**

**Temperature:**

**Dissolved Oxygen:**

**Other:**

**Flow:**

CFS

TEST: Mercury		METHOD: EPA 245.1					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009	

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038010  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River TVA discharge point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5A  
**Station No.:** KingAshOutF2  
**Date/Time Collected:** 10/27/2009 11:20  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.67 pH Units  
**Chlorine, residual:**  
**Conductivity:** 65 uMHO  
**Temperature:** 12.95  
**Dissolved Oxygen:** 11.85 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	270	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	390	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	1.2	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	9.7	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	41	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.31J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	2.0	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.46J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	57	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.4	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	2.1J	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.09J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	10	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	2.3J	µg/L	1.9	5	M Pattanayek	10/29/2009

**Lab-Sample Number:** K00003038010  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River TVA discharge point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5A  
**Station No.:** KingAshOutF2  
**Date/Time Collected:** 10/27/2009 11:20  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.67 pH Units  
**Chlorine, residual:**  
**Conductivity:** 65 uMHO  
**Temperature:** 12.95  
**Dissolved Oxygen:** 11.85 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

<b>Lab-Sample Number:</b>	K00003038011	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.39 pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley F	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	222 uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	14.13
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	9.76 mg/L
<b>Date/Time Collected:</b>	10/27/2009 10:50	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>	11/06/2009		
<b>Date/Time Received:</b>	10/27/2009 12:55		
<b>Received By:</b>	Ken Hitchman		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	10/28/2009				A Wilson	10/28/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	110	µg/L	2.9	10	A Wilson	10/30/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	110	µg/L	6.4	10	M Pattanayek	10/29/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	10/29/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	10/29/2009
Barium	41	µg/L	2.5	5	M Pattanayek	10/29/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	10/29/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	10/29/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	10/29/2009
Cobalt	0.17J	µg/L	0.04	1	M Pattanayek	10/29/2009
Copper	0.42J	µg/L	0.38	1	M Pattanayek	10/29/2009
Lead	0.22J	µg/L	0.10	1	M Pattanayek	10/29/2009
Manganese	35	µg/L	0.42	1	M Pattanayek	10/29/2009
Nickel	1.4	µg/L	0.25	1	M Pattanayek	10/29/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	10/29/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	10/29/2009
Thallium	0.03J	µg/L	0.03	1	M Pattanayek	10/29/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	10/29/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	10/29/2009

<b>Lab-Sample Number:</b>	K00003038011	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.39 pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley F	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	222 uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	14.13
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	9.76 mg/L
<b>Date/Time Collected:</b>	10/27/2009 10:50	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>	11/06/2009		
<b>Date/Time Received:</b>	10/27/2009 12:55		
<b>Received By:</b>	Ken Hitchman		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	11/3/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534


Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00003038  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

  
Analytical Supervisor



**Lab-Sample Number:** K00003038001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 10/27/2009 11:47  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.63 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 12.77  
**Dissolved Oxygen:** 11.25 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	20	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	19	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 10/27/2009 09:58  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 8.34 pH Units  
**Chlorine, residual:**  
**Conductivity:** 54 uMHO  
**Temperature:** 12.37  
**Dissolved Oxygen:** 11.3 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	20	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	18	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	14	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

<b>Lab-Sample Number:</b>	K00003038003	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	8.02      pH Units
<b>Sample Description:</b>	Approx 100' downstream from middle dredge pc	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	54      uMHO
<b>Project Site No.:</b>	2A	<b>Temperature:</b>	12.76
<b>Station No.:</b>	Dredge Plume	<b>Dissolved Oxygen:</b>	11.65      mg/L
<b>Date/Time Collected:</b>	10/27/2009    10:10	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>	11/06/2009		
<b>Date/Time Received:</b>	10/27/2009    12:55		
<b>Received By:</b>	Ken Hitchman		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	18	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	18	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.9 at underwater weir  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2B  
**Station No.:** EMORY001.9RO  
**Date/Time Collected:** 10/27/2009 10:18  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.79 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 12.63  
**Dissolved Oxygen:** 11.35 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	20	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	19	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	33	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 10/27/2009 10:30  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.56 pH Units  
**Chlorine, residual:**  
**Conductivity:** 57 uMHO  
**Temperature:** 13.11  
**Dissolved Oxygen:** 11.49 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	20	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	20	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	15	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 10/27/2009 10:45  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.52 pH Units  
**Chlorine, residual:**  
**Conductivity:** 86 uMHO  
**Temperature:** 13.47  
**Dissolved Oxygen:** 10.65 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	51	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	43	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5.  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.58 pH Units  
**Chlorine, residual:**  
**Conductivity:** 202 uMHO  
**Temperature:** 14.01  
**Dissolved Oxygen:** 9.44 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	96	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	79	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00003038008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5-FD  
**Station No.:** CLINC002.3RO-FD  
**Date/Time Collected:** 10/27/2009 11:03  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.58 pH Units  
**Chlorine, residual:**  
**Conductivity:** 202 uMHO  
**Temperature:** 14.01  
**Dissolved Oxygen:** 9.44 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	99	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	81	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected



Lab-Sample Number: K00003038009  
Project Name: TVA-Ash Spill  
Sample Description: Clinch River mile 2.3  
Sampler Project Name: TVA Ash Spill  
Project Site No.: 5-FB  
Station No.: CLINC002.3RO-FB  
Date/Time Collected: 10/27/2009 11:03  
Sampler's Name: Geoff Klein  
County: ROANE - 73  
Sample Matrix: Water  
EFO: Knoxville  
Sampling Agency: TDEC-WPC  
Billing Code: 327.34-20  
Send Report To: TDEC-WPC  
Agency Invoiced: TDEC-WPC  
Priority Date: 11/06/2009  
Date/Time Received: 10/27/2009 12:55  
Received By: Ken Hitchman

**Field Determinations**

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow:

CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peeples	10/30/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00003038010  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River TVA discharge point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5A  
**Station No.:** KingAshOutF2  
**Date/Time Collected:** 10/27/2009 11:20  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:** 11/06/2009  
**Date/Time Received:** 10/27/2009 12:55  
**Received By:** Ken Hitchman

**Field Determinations**  
**pH:** 7.67 pH Units  
**Chlorine, residual:**  
**Conductivity:** 65 uMHO  
**Temperature:** 12.95  
**Dissolved Oxygen:** 11.85 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	22	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	25	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

<b>Lab-Sample Number:</b>	K00003038011	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.39 pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	222 uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	14.13
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	9.76 mg/L
<b>Date/Time Collected:</b>	10/27/2009 10:50	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>	11/06/2009		
<b>Date/Time Received:</b>	10/27/2009 12:55		
<b>Received By:</b>	Ken Hitchman		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	120	mg/L	3.8	10	M Chen	11/3/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	92	mg/L	0.7	1	M Chen	11/2/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	10/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	10/30/2009

J - Estimated value between MDL and MQL  
MDL - Method Detection Limit  
MQL - Method Quantitation Limit  
U - Undetected